EXHIBIT 1

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

LUMINATI NETWORKS LTD.	§	
	§	
Plaintiff,	§	
	§	
v.	§	Case No. 2:19-CV-00395-JRG
TESO LT, UAB; OXYSALES, UAB;	§	
METACLUSTER LT, UAB;	§	
	§	
Defendants.	§	

LUMINATI NETWORKS LTD.'S P.R. 4-2 DISCLOSURES

Pursuant to P.R. 4-2 and the Docket Control Order (Dkt. No. 65), Plaintiff Luminati Network Ltd.'s ("Luminati") provides its preliminary proposed claim constructions and identification of extrinsic evidence for the terms from the Asserted Patents (U.S. Patent Nos. 10,257,319 (the "'319 Patent"), 10,484,510 (the "'510 Patent") and 10,469,614 (the "'614 Patent)) identified pursuant to P.R. 4-1 and attached hereto as Appendix A. Pursuant to P.R. 4-2(b), these disclosures are accompanied by a production of extrinsic evidence, with previously produced extrinsic evidence identified by bates number in Appendix A. These P.R. 4-2 disclosures are based on the information currently available to Luminati. Plaintiff reserves the right to amend these disclosures including the proposed constructions of these terms and identification of extrinsic evidence based on further discovery.

Luminati also reserves the right to offer further extrinsic evidence to rebut preliminary claim constructions, testimony, or extrinsic evidence Defendant offers in support of their claim construction positions. Luminati may also provide expert declarations and/or testimony of Plaintiff's expert Dr. Tom Rhyne, as evidence of how one having the ordinary skill in the art at the time of the inventions would interpret the terms at issue. Such declarations and/or testimony

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may address both the general understanding of the relevant terms and phrases in the field of the

Asserted Patents, as well as the understanding and/or definiteness of terms and phrases in the

context of the Asserted Patents' specifications and claims. Luminati's expert may also provide

testimony concerning the appropriate level of skill in the art at the time of the inventions and the

background of the technology at issue at the time of the inventions. Luminati reserve the right to

introduce expert declarations or testimony to rebut Defendant's claim construction and

indefiniteness positions and any expert declarations or testimony introduced by Defendant.

Dated: July 28, 2020

By: */s/ Ronald Wielkopolski__*

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CERTIFICATE OF SERVICE

I hereby certify that counsel of record is being served with a copy of this document by email on July 28, 2020.

Respectfully submitted,

By: */s/ Ronald Wielkopolski*

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['319, '510, '614] PATENT CLAIM TERMS FOR CONSTRUCTION

No.	Patent	Claim Language	Claim(s) of Patent Implicated	Plaintiff's Proposed Construction and Evidence in Support
1	'319 Patent	Preamble	Claim 1	Proposed Construction: Limiting Extrinsic Support:
2	'319 Patent	"client device"	Claims 1, 2, 14, 17, 22, 24, and 25	Proposed Construction: "Consumer computer" or, in the alternative, "plain and ordinary meaning" Intrinsic Evidence: 2:44-46 Extrinsic Support: Tesonet Claim Construction Order (Luminati Networks Ltd. v. UAB Tesonet and UAB Metacluster LT, Case No. 2:18-cv-299, "Tesonet," ECF 121): Construction of "Device": A physical device. Tesonet Claim Construction Order (ECF 121): Construction of "Client Device": A device that is operating in the role of a client by requesting services, functionalities, or resources from other devices. PC Mag Encyclopedia: Definition of "computing device": "Any electronic equipment controlled by a CPU, including desktop and laptop computers, smartphones and tablets. It usually refers to a general-purpose device that can accept software for many purposes in contrast with a dedicated unit of equipment such as a network switch or router." https://www.pcmag.com/encyclopedia/term/66551/computing-device LUM-00003575 RFC 1983 at 11: Definition of "client": A computer system or process that requests a service of another computer system or process. A workstation requesting the contents of a file from a file server is a client of the file server. https://tools.ietf.org/html/rfc1983 RFC 2828 at 39: Definition of "Client": (I) A system entity that requests and uses a service provided by another system entity, called a 'server.' https://tools.ietf.org/html/rfc2828 W3 Glossary of Terms for Device Independence at 2: Definition of "Client": The role adopted by an application when it is retrieving and/or rendering resources or resource manifestations.

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				https://www.w3.org/TR/di-gloss/#ref-wca-terms
				W3 Hypertext Glossary: Definition of "Client": A program which requests services of another program. Normally the browser is a client of a data server.
				https://www.w3.org/History/19921103-hypertext/hypertext/WWW/Terms.html
				IEV ref 732-01-12 definition of "client": "functional unit that requests and receives services from a server."
				LUM-00003490-3491
				RFC 2828 at 157: Definition of "Server": (I) A system entity that provides a service in response to requests from other system entities called client.
				https://tools.ietf.org/html/rfc2828
				W3 Glossary of Terms for Device Independence at 4: Definition of "Server": The role adopted by an application when it is supplying resources or resource manifestations.
				https://www.w3.org/TR/di-gloss/#ref-wca-terms
				W3 Hypertext Terms: Definition of "Server": A program which provides a service to another, known as the client. In a hypertext system, a server will provide hypertext information to a browser."
				https://www.w3.org/History/19921103-hypertext/hypertext/WWW/Terms.html
				Merriam Webster: Definition of "server": A computer in a network that is used to provide services (such as access to files or shared peripherals or the routing of e-mail) to other computers in the network.
				https://www.merriam-webster.com/dictionary/server
				LUM-00003579
				IEV ref 732-01-12 definition of server: "functional unit that provides services to workstations, to personal computers or to other functional units in a computer network"
				http://www.electropedia.org/iev/iev.nsf/display?openform&ievref=732-01-12
				LUM-00003576
3	'319 Patent	"first server"	Claims 1, 21, and 25	Proposed Construction: "web server" Intrinsic evidence: 4:62-5:7; 19:16-32

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					Extrinsic Support: ATIS: Definition of "web server": A software program or server computer equipped to offer World Wide Web access. Note: A web server accommodates requests from users, retrieves requested files or applications, and issues error messages. https://glossary.atis.org/glossary/web-server/?search=WEB%20SERVER&page_number=&sort=ASC RFC 1983 at 49: Definition of "server": A provider or resources (e.g. file servers and name servers). https://tools.ietf.org/html/rfc1983 RFC 2828 at 157: Definition of "Server": (I) A system entity that provides a service in response to requests from other system entities called client. https://tools.ietf.org/html/rfc2828 W3 Glossary of Terms for Device Independence at 4: Definition of "Server": The role adopted by an application when it is supplying resources or resource manifestations. https://www.w3.org/TR/di-gloss/#ref-wca-terms W3 Hypertext Terms: Definition of "Server": A program which provides a service to another, known as the client. In a hypertext system, a server will provide hypertext information ot a browser." https://www.w3.org/History/19921103-hypertext/hypertext/WWW/Terms.html Merriam Webster: Definition of "server": A computer in a network that is used to provide services (such as access to files or shared peripherals or the routing of e-mail) to other computers in the network. https://www.merriam-webster.com/dictionary/server LUM-00003579 IEV ref 732-01-12 definition of server: "functional unit that provides services to workstations, to personal computers or to other functional units in a computer network" http://www.electropedia.org/iev/iev.nsf/display?openform&ievref=732-01-12 LUM-00003576

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4	'319 Patent	"second server"	Claims 1, 2, 17, 21, 24, and 25	Proposed Construction: "A server that is not the client device or first server" Intrinsic evidence: 19:16-32 Extrinsic Support: RFC 1983 at 49: Definition of "server": A provider or resources (e.g. file servers and name servers). https://tools.ietf.org/html/rfc1983 RFC 2828 at 157: Definition of "Server": (I) A system entity that provides a service in response to requests from other system entities called client. https://tools.ietf.org/html/rfc2828 W3 Glossary of Terms for Device Independence at 4: Definition of "Server": The role adopted by an application when it is supplying resources or resource manifestations. https://www.w3.org/TR/di-gloss/#ref-wca-terms W3 Hypertext Terms: Definition of "Server": A program which provides a service to another, known as the client. In a hypertext system, a server will provide hypertext information to a browser."

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5	'319 Patent	"the first IP address"	Claim 2	Proposed Construction: Definite / plain & ordinary meaning Extrinsic Support: ATIS: Definition of "IP address": A device's or resource's numerical address as expressed in the format specified in the Internet Protocol. Note 1: In the current addressing format, IP version 4 (IPv4), an IP address is a 32-bit sequence divided

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| | | | | into four groups of decimal numbers separated by periods ("dots"), commonly referred to as "dotted decimals." The IP address of a device is made up of two parts: the number of the network to which it is connected, and a sequence representing the specific device within that network. An IP address may be used on private intranets, as well as The Internet. Note 2: Due to inefficiencies that have arisen in address assignment, available IPv4 addresses are nearly exhausted. A newer version of IP addressing (IP version 6, consisting of a 128-bit numerical sequence) is currently being developed.

https://glossary.atis.org/glossary/ip-address/?char=I&page_number=45&sort=ASC

ITU J.120 at 2: Definition of "IP address": The network layer address defined by the Internet Protocol. This address is mapped onto the layer one address of the respective system.

https://www.itu.int/rec/T-REC-J.120-200005-I/en

RFC 1983 at 31: Definition of "IP address": The 32-bit address defined by the Internet Protocol in RFC 791. It is usually represented in dotted decimal notation.

https://tools.ietf.org/html/rfc1983

RFC 2460 at 2: IP version 6 (IPv6) is a new version of the Internet Protocol, designed as the successor to IP version 4 (IPv4) [RFC-791]…. IPv6 increases the IP address size from 32 bits to 128 bits, to support more levels of addressing hierarchy, a much greater number of addressable nodes, and simpler auto-configuration of addresses.

https://tools.ietf.org/html/rfc2460 |
| 6 | '319 Patent | "determining that first content is valid" | Claim 14 | Proposed Construction: Definite / plain & ordinary meaning

Extrinsic Support:

Tesonet Claim Construction Order (ECF 121): Construction of "content": Digital data.

ATIS: Definition of "content": **1.** In Web terminology, the text, media, and links or information displayed by a browser at a particular Web site. **2.** Electronic or mechanical representation, in analog or digital form, of audiovisual data consisting of individually or in composite form still or moving images, audio, text, or graphics to include related data and metadata.

https://glossary.atis.org/glossary/content/?search=CONTENT&page_number=1&sort=ASC

ITU T.411 at 7: Definition of "content": The information conveyed by the document, other than the structural information, and that is intended for human perception. |

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| | | | | | https://www.itu.int/net/ITU-R/asp/terminology-definition.asp?lang=en&rlink={0A3C5266-56D4-4ED8-9076-A4345192D7EB}

LUM-00003485

ITU H.740 at 1: Definition of "content": Encoded generic value, media or non-media data.

https://www.itu.int/rec/T-REC-H.740-201003-I/en

ITU-T H.780 (06/2012) at 2: Definition of content: A combination of audio, still image, graphic, video, or data. NOTE – A variety of formats is classified as the "data" (e.g., text, encoded values, multimedia description language introduced by ITU-T H.760).

https://www.itu.int/net/ITU-R/asp/terminology-definition.asp?lang=en&rlink={46309866-F797-45BC-81E9-2B6B2DAC1F32}

LUM-00003484

Merriam-Webster: Definition of "content": the principal substance (such as written matter, illustrations, or music) offered by a website … Internet users have evolved an ethos of free content in the Internet.

https://www.merriam-webster.com/dictionary/content

ATIS: Definition of "validation": **1.** Tests to determine whether an implemented system fulfills its requirements. **2.** The checking of data for correctness or for compliance with applicable standards, rules, and conventions. **3.** [The] process of applying specialized security test and evaluation procedures, tools, and equipment needed to establish acceptance for joint usage of an information system (IS) by one or more departments or agencies and their contractors. [INFOSEC-99] Note: This action will include, as necessary, final development, evaluation, and testing, preparatory to acceptance by senior security test and evaluation staff specialists. [NIS] **4.** In universal personal telecommunications, the process of verifying that a user or terminal is authorized to access UPT services.**5.** The checking of a representation of a system or part of a system for conformance with its requirements [CESG].**6.**The process of evaluating a ported application, software, or system to ensure compliance with requirements [POSIX.0].

https://glossary.atis.org/glossary/validation/?char=V&page_number=1&sort=ASC

ITU-R M.1224 at 36: Definition of "Validation (messages)": The process of checking the integrity of a message or selected parts of a message. |

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				https://www.itu.int/rec/R-REC-M.1224/en
7	'319 Patent	"based on the received HTTP header"	Claim 15	Proposed Construction: Definite / plain & ordinary meaning Extrinsic Support: ATIS: Definition of "HTTP": In the World Wide Web, a protocol that facilitates the transfer of hypertext-based files between local and remote systems. https://glossary.atis.org/glossary/hypertext-transfer-protocol-http/ ATIS: Definition of "header": The portion of a message that contains information used to guide the message to the correct destination. Note: Examples of items that may be in a header are the addresses of the sender and receiver, precedence level, routing instructions, and synchronizing bits. https://glossary.atis.org/glossary/header/?search=HEADER&page_number=&sort=ASC RFC 1983 at 23: Definition of "header": The portion of a packet, preceding the actual data, containing source and destination information. It may also error checking and other fields. A header is also the part of an electronic mail message which precedes the body of a message and contains, among other things, the message originator, date and time. See also: Electronic Mail, packet, error checking. https://tools.ietf.org/html/rfc1983 RFC 1983 at 26: Definition of "Hypertext Transfer Protocol (HTTP)": The protocol used by www to transfer HTML files. https://tools.ietf.org/html/rfc1983
8	'319 Patent	"periodically communicating"	Claim 17	Proposed Construction: Definite / plain & ordinary meaning Extrinsic Support: Merriam-Webster: Definition of "periodically": 1. At regular intervals of time; 2. From time to time: frequently. https://www.merriam-webster.com/dictionary/periodically
9	'510 Patent	Preamble	Claim 1	Proposed Construction: Limiting Extrinsic Support:
10	'510 Patent	"web server"	Claims 1 and 16	Proposed Construction: Plain and ordinary meaning Intrinsic Evidence: 4:64-5:9 Extrinsic Support:

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				RFC 1983 at 49: Definition of "server": A provider or resources (e.g. file servers and name servers).
				https://tools.ietf.org/html/rfc1983
				RFC 2828 at 157: Definition of "Server": (I) A system entity that provides a service in response to requests from other system entities called client.
				https://tools.ietf.org/html/rfc2828
				W3 Glossary of Terms for Device Independence at 4: Definition of "Server": The role adopted by an application when it is supplying resources or resource manifestations.
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				W3 Hypertext Terms: Definition of "Server": A program which provides a service to another, known as the client. In a hypertext system, a server will provide hypertext information ot a browser."
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				LUM-00003579
				IEV ref 732-01-12 definition of server: "functional unit that provides services to workstations, to personal computers or to other functional units in a computer network"
				http://www.electropedia.org/iev/iev.nsf/display?openform&ievref=732-01-12
				LUM-00003576
				RFC 1983 at 11: Definition of "client": A computer system or process that requests a service of another computer system or

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11	'510 Patent	"client device"	Claims 1, 2, 8, 10, 13, 15, 18, and 19	Proposed Construction: "Consumer computer," or, in the alternative, "plain and ordinary meaning" Intrinsic Evidence: 2:47-49 Extrinsic Support: Tesonet Claim Construction Order (ECF 121): Construction of "Device": A physical device. Tesonet Claim Construction Order (ECF 121): Construction of "Client Device": A device that is operating in the role of a client by requesting services, functionalities, or resources from other devices. PC Mag Encyclopedia: Definition of "computing device: "Any electronic equipment controlled by a CPU, including desktop and laptop computers, smartphones and tablets. It usually refers to a general-purpose device that can accept software for many purposes in contrast with a dedicated unit of equipment such as a network switch or router." https://www.pcmag.com/encyclopedia/term/66551/computing-device LUM-00003575 RFC 1983 at 11: Definition of "client": A computer system or process that requests a service of another computer system or process. A workstation requesting the contents of a file from a file server is a client of the file server.

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					RFC 2828 at 157: Definition of "Server": (I) A system entity that provides a service in response to requests from other system entities called client.
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12	'510 Patent	"second server"	Claims 1, 2, 8, 15, and 18	Proposed Construction: "A server that is not the client device or web server" Extrinsic Support: RFC 1983 at 49: Definition of "server": A provider or resources (e.g. file servers and name servers). https://tools.ietf.org/html/rfc1983 RFC 2828 at 157: Definition of "Server": (I) A system entity that provides a service in response to requests from other system entities called client. https://tools.ietf.org/html/rfc2828 W3 Glossary of Terms for Device Independence at 4: Definition of "Server": The role adopted by an application when it is supplying resources or resource manifestations. https://www.w3.org/TR/di-gloss/#ref-wca-terms W3 Hypertext Terms: Definition of "Server": A program which provides a service to another, known as the client. In a hypertext system, a server will provide hypertext information to a browser." https://www.w3.org/History/19921103-hypertext/hypertext/WWW/Terms.html Merriam Webster: Definition of "server": A computer in a network that is used to provide services (such as access to files or shared peripherals or the routing of e-mail) to other computers in the network. https://www.merriam-webster.com/dictionary/server LUM-00003579 IEV ref 732-01-12 definition of server: "functional unit that provides services to workstations, to personal computers or to other functional units in a computer network" http://www.electropedia.org/iev/iev.nsf/display?openform&iev ref=732-01-12

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				LUM-00003576 RFC 1983 at 11: Definition of "client": A computer system or process that requests a service of another computer system or process. A workstation requesting the contents of a file from a file server is a client of the file server. https://tools.ietf.org/html/rfc1983 RFC 2828 at 39: Definition of "Client": (I) A system entity that requests and uses a service provided by another system entity, called a 'server.' https://tools.ietf.org/html/rfc2828 W3 Glossary of Terms for Device Independence at 2: Definition of "Client": The role adopted by an application when it is retrieving and/or rendering resources or resource manifestations. https://www.w3.org/TR/di-gloss/#ref-wca-terms W3 Hypertext Glossary: Definition of "Client": A program which requests services of another program. Normally the browser is a client of a data server. https://www.w3.org/History/19921103-hypertext/hypertext/WWW/Terms.html
13	'510 Patent	"in response to the receiving of the first content identifier"	Claim 1	Proposed Construction: Definite / plain & ordinary meaning Extrinsic Support: Tesonet Claim Construction Order (ECF 121): Construction of "content": Digital data. ATIS: Definition of "content": **1.** In Web terminology, the text, media, and links or information displayed by a browser at a particular Web site. **2.** Electronic or mechanical representation, in analog or digital form, of audiovisual data consisting of individually or in composite form still or moving images, audio, text, or graphics to include related data and metadata. https://glossary.atis.org/glossary/content/?search=CONTENT&page_number=1&sort=ASC ITU T.411 at 7: Definition of "content": The information conveyed by the document, other than the structural information, and that is intended for human perception. https://www.itu.int/net/ITU-R/asp/terminology-definition.asp?lang=en&rlink={0A3C5266-56D4-4ED8-9076-A4345192D7EB} LUM-00003485

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				ITU H.740 at 1: Definition of "content": Encoded generic value, media or non-media data. https://www.itu.int/rec/T-REC-H.740-201003-I/en ITU-T H.780 (06/2012) at 2: Definition of content: A combination of audio, still image, graphic, video, or data. NOTE – A variety of formats is classified as the "data" (e.g., text, encoded values, multimedia description language introduced by ITU-T H.760). https://www.itu.int/net/ITU-R/asp/terminology-definition.asp?lang=en&rlink={46309866-F797-45BC-81E9-2B6B2DAC1F32} LUM-00003484 Merriam-Webster: Definition of "content": the principal substance (such as written matter, illustrations, or music) offered by a website … Internet users have evolved an ethos of free content in the Internet. https://www.merriam-webster.com/dictionary/content ITU X.902 at 11: Definition of "Identifier": An unambiguous name, in a given naming context. https://www.itu.int/net/ITU-R/asp/terminology-definition.asp?lang=en&rlink={5C58FBE6-BE32-4E31-81CE-676FCB191E2B} LUM-00003486 ITU Q.9 at 62: Definition of "identifier": A character, or group of characters, used to identify or name an item of data and possibly to indicate certain properties of that data." https://www.itu.int/net/ITU-R/asp/terminology-definition.asp?lang=en&rlink={A842D85F-D255-4218-98D1-D8AD272C9067} LUM-00003487
14	'510 Patent	"the first client IP address"	Claim 2	Proposed Construction: Definite / plain & ordinary meaning Extrinsic Support: Tesonet Claim Construction Order (ECF 121): Construction of "Device": A physical device. Tesonet Claim Construction Order (ECF 121): Construction of "Client Device": A device that is operating in the role of a client by requesting services, functionalities, or resources from other devices.

				PC Mag Encyclopedia: Definition of "computing device:" "Any electronic equipment controlled by a CPU, including desktop and laptop computers, smartphones and tablets. It usually refers to a general-purpose device that can accept software for many purposes in contrast with a dedicated unit of equipment such as a network switch or router." https://www.pcmag.com/encyclopedia/term/66551/computing-device LUM-00003575 RFC 1983 at 11: Definition of "client": A computer system or process that requests a service of another computer system or process. A workstation requesting the contents of a file from a file server is a client of the file server. https://tools.ietf.org/html/rfc1983 RFC 2828 at 39: Definition of "Client": (I) A system entity that requests and uses a service provided by another system entity, called a 'server.' https://tools.ietf.org/html/rfc2828 W3 Glossary of Terms for Device Independence at 2: Definition of "Client": The role adopted by an application when it is retrieving and/or rendering resources or resource manifestations. https://www.w3.org/TR/di-gloss/#ref-wca-terms W3 Hypertext Glossary: Definition of "Client": A program which requests services of another program. Normally the browser is a client of a data server. https://www.w3.org/History/19921103-hypertext/hypertext/WWW/Terms.html ATIS: Definition of "IP address": A device's or resource's numerical address as expressed in the format specified in the Internet Protocol. Note 1: In the current addressing format, IP version 4 (IPv4), an IP address is a 32-bit sequence divided into four groups of decimal numbers separated by periods ("dots"), commonly referred to as "dotted decimals." The IP address of a device is made up of two parts: the number of the network to which it is connected, and a sequence representing the specific device within that network. An IP address may be used on private intranets, as well as The Internet. Note 2: Due to inefficiencies that have arisen in address assignment, available IPv4 addresses are nearly exhausted. A newer version of IP addressing (IP version 6, consisting of a 128-bit numerical sequence) is currently being developed.

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				https://glossary.atis.org/glossary/ip-address/?char=I&page_number=45&sort=ASC ITU J.120 at 2: Definition of "IP address": The network layer address defined by the Internet Protocol. This address is mapped onto the layer one address of the respective system. https://www.itu.int/rec/T-REC-J.120-200005-I/en RFC 1983: Definition of "IP address" at 31: The 32-bit address defined by the Internet Protocol in RFC 791. It is usually represented in dotted decimal notation. https://tools.ietf.org/html/rfc1983 RFC 2460 at 2: IP version 6 (IPv6) is a new version of the Internet Protocol, designed as the successor to IP version 4 (IPv4) [RFC-791]…. IPv6 increases the IP address size from 32 bits to 128 bits, to support more levels of addressing hierarchy, a much greater number of addressable nodes, and simpler auto-configuration of addresses. https://tools.ietf.org/html/rfc2460
15	'510 Patent	"periodically communicating"	Claim 8	Proposed Construction: Definite / plain & ordinary meaning Extrinsic Support: Merriam-Webster: Definition of "periodically": 1. At regular intervals of time; 2. From time to time: frequently. https://www.merriam-webster.com/dictionary/periodically
16	'510 Patent	"determining that first content is valid"	Claim 10	Proposed Construction: Definite / plain & ordinary meaning Extrinsic Support: Tesonet Claim Construction Order (ECF 121): Construction of "content": Digital data. ATIS: Definition of "content": **1.** In Web terminology, the text, media, and links or information displayed by a browser at a particular Web site. **2.** Electronic or mechanical representation, in analog or digital form, of audiovisual data consisting of individually or in composite form still or moving images, audio, text, or graphics to include related data and metadata. https://glossary.atis.org/glossary/content/?search=CONTENT&page_number=1&sort=ASC ITU T.411 at 7: Definition of "content": The information conveyed by the document, other than the structural information, and that is intended for human perception.

| | | | | https://www.itu.int/net/ITU-R/asp/terminology-definition.asp?lang=en&rlink={0A3C5266-56D4-4ED8-9076-A4345192D7EB}

LUM-00003485

ITU H.740 at 1: Definition of "content": Encoded generic value, media or non-media data.

https://www.itu.int/rec/T-REC-H.740-201003-I/en

ITU-T H.780 (06/2012) at 2: Definition of content: A combination of audio, still image, graphic, video, or data. NOTE – A variety of formats is classified as the "data" (e.g., text, encoded values, multimedia description language introduced by ITU-T H.760).

https://www.itu.int/net/ITU-R/asp/terminology-definition.asp?lang=en&rlink={46309866-F797-45BC-81E9-2B6B2DAC1F32}

LUM-00003484-LUM-00003484

Merriam-Webster: Definition of "content": the principal substance (such as written matter, illustrations, or music) offered by a website … Internet users have evolved an ethos of free content in the Internet.

https://www.merriam-webster.com/dictionary/content

ATIS: Definition of "validation": **1.** Tests to determine whether an implemented system fulfills its requirements. **2.** The checking of data for correctness or for compliance with applicable standards, rules, and conventions. **3.** [The] process of applying specialized security test and evaluation procedures, tools, and equipment needed to establish acceptance for joint usage of an information system (IS) by one or more departments or agencies and their contractors. [INFOSEC-99] Note: This action will include, as necessary, final development, evaluation, and testing, preparatory to acceptance by senior security test and evaluation staff specialists. [NIS] **4.** In universal personal telecommunications, the process of verifying that a user or terminal is authorized to access UPT services.**5**. The checking of a representation of a system or part of a system for conformance with its requirements [CESG].**6.**The process of evaluating a ported application, software, or system to ensure compliance with requirements [POSIX.0].

https://glossary.atis.org/glossary/validation/?char=V&page_number=1&sort=ASC

ITU-R M.1224 at 36: Definition of "Validation (messages)": The process of checking the integrity of a message or selected parts of a message. |
|--|--|--|--|--|

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				https://www.itu.int/rec/R-REC-M.1224/en
17	'510 Patent	"based on the received HTTP header"	Claim 11	Proposed Construction: Definite / plain & ordinary meaning Extrinsic Support: ATIS: Definition of "HTTP": In the World Wide Web, a protocol that facilitates the transfer of hypertext-based files between local and remote systems. https://glossary.atis.org/glossary/hypertext-transfer-protocol-http/ ATIS: Definition of "header": The portion of a message that contains information used to guide the message to the correct destination. Note: Examples of items that may be in a header are the addresses of the sender and receiver, precedence level, routing instructions, and synchronizing bits. https://glossary.atis.org/glossary/header/?search=HEADER&page_number=&sort=ASC RFC 1983 at 23: Definition of "header": The portion of a packet, preceding the actual data, containing source and destination information. It may also error checking and other fields. A header is also the part of an electronic mail message which precedes the body of a message and contains, among other things, the message originator, date and time. See also: Electronic Mail, packet, error checking. https://tools.ietf.org/html/rfc1983 RFC 1983 at 26: Definition of "Hypertext Transfer Protocol (HTTP)": The protocol used by www to transfer HTML files. https://tools.ietf.org/html/rfc1983
18	'510 Patent	"the sending of the Hypertext Transfer Protocol (HTTP) request"	Claim 13	Proposed Construction: Definite / plain & ordinary meaning Extrinsic Support: ATIS: Definition of "HTTP": In the World Wide Web, a protocol that facilitates the transfer of hypertext-based files between local and remote systems. https://glossary.atis.org/glossary/hypertext-transfer-protocol-http/ RFC 1983 at 26: Definition of "Hypertext Transfer Protocol (HTTP)": The protocol used by www to transfer HTML files. https://tools.ietf.org/html/rfc1983
19	'510 Patent	"receiving and storing of the first content"	Claim 13	Proposed Construction: Definite / plain & ordinary meaning Extrinsic Support:

				Tesonet Claim Construction Order (ECF 121): Construction of "content": Digital data. ATIS: Definition of "content": **1.** In Web terminology, the text, media, and links or information displayed by a browser at a particular Web site. **2.** Electronic or mechanical representation, in analog or digital form, of audiovisual data consisting of individually or in composite form still or moving images, audio, text, or graphics to include related data and metadata. https://glossary.atis.org/glossary/content/?search=CONTENT&page_number=1&sort=ASC ITU T.411 at 7: Definition of "content": The information conveyed by the document, other than the structural information, and that is intended for human perception. https://www.itu.int/net/ITU-R/asp/terminology-definition.asp?lang=en&rlink={0A3C5266-56D4-4ED8-9076-A4345192D7EB} LUM-00003485 ITU H.740 at 1: Definition of "content": Encoded generic value, media or non-media data. https://www.itu.int/rec/T-REC-H.740-201003-I/en ITU-T H.780 (06/2012) at 2: Definition of content: A combination of audio, still image, graphic, video, or data. NOTE – A variety of formats is classified as the "data" (e.g., text, encoded values, multimedia description language introduced by ITU-T H.760). https://www.itu.int/net/ITU-R/asp/terminology-definition.asp?lang=en&rlink={46309866-F797-45BC-81E9-2B6B2DAC1F32} LUM-00003484-LUM-00003484 Merriam-Webster: Definition of "content": the principal substance (such as written matter, illustrations, or music) offered by a website … Internet users have evolved an ethos of free content in the Internet. https://www.merriam-webster.com/dictionary/content
20	'510 Patent	"the sending of the part of, or the whole of, the stored first content"	Claim 13	Proposed Construction: Definite / plain & ordinary meaning Extrinsic Support: Tesonet Claim Construction Order (ECF 121): Construction of "content": Digital data.

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<table>
<tr>
<td colspan="4"></td>
<td>ATIS: Definition of "content": **1.** In Web terminology, the text, media, and links or information displayed by a browser at a particular Web site. **2.** Electronic or mechanical representation, in analog or digital form, of audiovisual data consisting of individually or in composite form still or moving images, audio, text, or graphics to include related data and metadata.

https://glossary.atis.org/glossary/content/?search=CONTENT&page_number=1&sort=ASC

ITU T.411 at 7: Definition of "content": The information conveyed by the document, other than the structural information, and that is intended for human perception.

https://www.itu.int/net/ITU-R/asp/terminology-definition.asp?lang=en&rlink={0A3C5266-56D4-4ED8-9076-A4345192D7EB}

LUM-00003485

ITU H.740 at 1: Definition of "content": Encoded generic value, media or non-media data.

https://www.itu.int/rec/T-REC-H.740-201003-I/en

ITU-T H.780 (06/2012) at 2: Definition of content: A combination of audio, still image, graphic, video, or data. NOTE – A variety of formats is classified as the "data" (e.g., text, encoded values, multimedia description language introduced by ITU-T H.760).

https://www.itu.int/net/ITU-R/asp/terminology-definition.asp?lang=en&rlink={46309866-F797-45BC-81E9-2B6B2DAC1F32}

LUM-00003484-LUM-00003484

Merriam-Webster: Definition of "content": the principal substance (such as written matter, illustrations, or music) offered by a website … Internet users have evolved an ethos of free content in the Internet.

https://www.merriam-webster.com/dictionary/content</td>
</tr>
<tr>
<td>21</td>
<td>'614 Patent</td>
<td>Preamble</td>
<td>Claim 1</td>
<td>Proposed Construction: Limiting

Extrinsic Support:</td>
</tr>
<tr>
<td>22</td>
<td>'614 Patent</td>
<td>"client device"</td>
<td>Claims 1, 2, 4, 5, 6, 9, 15, 18, 19, 25, and 28</td>
<td>Proposed Construction: "A device using a client dedicated operating system and operating in the role of a client by requesting services, functionalities, or resources from servers"

Intrinsic Evidence: Abstract; 4:40-8:59; 7:6-26; 52:48-51; 62:33-40; 75:35-59;83:4-15; 95:4-61</td>
</tr>
</table>

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					Extrinsic Support: Tesonet Claim Construction Order (ECF 121): Construction of "Device": A physical device. Tesonet Claim Construction Order (ECF 121): Construction of "Client Device": A device that is operating in the role of a client by requesting services, functionalities, or resources from other devices. U.S. Patent No. 10,257,319 at 2:44-46: "In the network 50, files are stored on computers of consumers, referred to herein as client devices 60." PC Mag Encyclopedia: Definition of "computing device: "Any electronic equipment controlled by a CPU, including desktop and laptop computers, smartphones and tablets. It usually refers to a general-purpose device that can accept software for many purposes in contrast with a dedicated unit of equipment such as a network switch or router." https://www.pcmag.com/encyclopedia/term/66551/computing-device LUM-00003575 RFC 1983 at 11: Definition of "client": A computer system or process that requests a service of another computer system or process. A workstation requesting the contents of a file from a file server is a client of the file server. https://tools.ietf.org/html/rfc1983 RFC 2828 at 39: Definition of "Client": (I) A system entity that requests and uses a service provided by another system entity, called a 'server.' https://tools.ietf.org/html/rfc2828 W3 Glossary of Terms for Device Independence at 2: Definition of "Client": The role adopted by an application when it is retrieving and/or rendering resources or resource manifestations. https://www.w3.org/TR/di-gloss/#ref-wca-terms W3 Hypertext Glossary: Definition of "Client": A program which requests services of another program. Normally the browser is a client of a data server. https://www.w3.org/History/19921103-hypertext/hypertext/WWW/Terms.html IEV ref 732-01-12 definition of "client": "functional unit that requests and receives services from a server."

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				LUM-00003490-3491
				RFC 2828 at 157: Definition of "Server": (I) A system entity that provides a service in response to requests from other system entities called client.
				https://tools.ietf.org/html/rfc2828
				W3 Glossary of Terms for Device Independence at 4: Definition of "Server": The role adopted by an application when it is supplying resources or resource manifestations.
				https://www.w3.org/TR/di-gloss/#ref-wca-terms
				W3 Hypertext Terms: Definition of "Server": A program which provides a service to another, known as the client. In a hypertext system, a server will provide hypertext information to a browser."
				https://www.w3.org/History/19921103-hypertext/hypertext/WWW/Terms.html
				Merriam Webster: Definition of "server": A computer in a network that is used to provide services (such as access to files or shared peripherals or the routing of e-mail) to other computers in the network.
				https://www.merriam-webster.com/dictionary/server
				LUM-00003579
				IEV ref 732-01-12 definition of server: "functional unit that provides services to workstations, to personal computers or to other functional units in a computer network"
				http://www.electropedia.org/iev/iev.nsf/display?openform&ievref=732-01-12
				LUM-00003576
23	'614 Patent	"first server"	Claims 1, 2, 4, 5, 6, 26, and 28	Proposed Construction: "A server that is not the client device or web server"
				Extrinsic Support:
				RFC 1983 at 49: Definition of "server": A provider or resources (e.g. file servers and name servers).
				https://tools.ietf.org/html/rfc1983
				RFC 2828 at 157: Definition of "Server": (I) A system entity that provides a service in response to requests from other system entities called client.
				https://tools.ietf.org/html/rfc2828

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					W3 Glossary of Terms for Device Independence at 4: Definition of "Server": The role adopted by an application when it is supplying resources or resource manifestations. https://www.w3.org/TR/di-gloss/#ref-wca-terms W3 Hypertext Terms: Definition of "Server": A program which provides a service to another, known as the client. In a hypertext system, a server will provide hypertext information to a browser." https://www.w3.org/History/19921103-hypertext/hypertext/WWW/Terms.html Merriam Webster: Definition of "server": A computer in a network that is used to provide services (such as access to files or shared peripherals or the routing of e-mail) to other computers in the network. https://www.merriam-webster.com/dictionary/server LUM-00003579 IEV ref 732-01-12 definition of server: "functional unit that provides services to workstations, to personal computers or to other functional units in a computer network" http://www.electropedia.org/iev/iev.nsf/display?openform&ievref=732-01-12 LUM-00003576 RFC 1983 at 11: Definition of "client": A computer system or process that requests a service of another computer system or process. A workstation requesting the contents of a file from a file server is a client of the file server. https://tools.ietf.org/html/rfc1983 RFC 2828 at 39: Definition of "Client": (I) A system entity that requests and uses a service provided by another system entity, called a 'server.' https://tools.ietf.org/html/rfc2828 W3 Glossary of Terms for Device Independence at 2: Definition of "Client": The role adopted by an application when it is retrieving and/or rendering resources or resource manifestations. https://www.w3.org/TR/di-gloss/#ref-wca-terms W3 Hypertext Glossary: Definition of "Client": A program which requests services of another program. Normally the browser is a client of a data server.

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				https://www.w3.org/History/19921103-hypertext/hypertext/WWW/Terms.html
24	'614 Patent	"web server"	Claims 1, and 29	Proposed Construction: Plain and ordinary meaning Extrinsic Support: ATIS: Definition of "web server": A software program or server computer equipped to offer World Wide Web access. Note: A web server accommodates requests from users, retrieves requested files or applications, and issues error messages. https://glossary.atis.org/glossary/web-server/?search=WEB%20SERVER&page_number=&sort=ASC RFC 1983 at 49: Definition of "server": A provider or resources (e.g. file servers and name servers). https://tools.ietf.org/html/rfc1983 RFC 2828 at 157: Definition of "Server": (I) A system entity that provides a service in response to requests from other system entities called client. https://tools.ietf.org/html/rfc2828 W3 Glossary of Terms for Device Independence at 4: Definition of "Server": The role adopted by an application when it is supplying resources or resource manifestations. https://www.w3.org/TR/di-gloss/#ref-wca-terms W3 Hypertext Terms: Definition of "Server": A program which provides a service to another, known as the client. In a hypertext system, a server will provide hypertext information to a browser." https://www.w3.org/History/19921103-hypertext/hypertext/WWW/Terms.html Merriam Webster: Definition of "server": A computer in a network that is used to provide services (such as access to files or shared peripherals or the routing of e-mail) to other computers in the network. https://www.merriam-webster.com/dictionary/server LUM-00003579 IEV ref 732-01-12 definition of server: "functional unit that provides services to workstations, to personal computers or to other functional units in a computer network"

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25	'614 Patent	"the steps are sequentially executed"	Claim 7	Proposed Construction: Definite / plain & ordinary meaning Extrinsic Support: Merriam-Webster: Definition of "sequential": 1: of, relating to, or arranged in a sequence: serial sequential file systems; 2: following in sequence. https://www.merriam-webster.com/dictionary/SEQUENTIALLY?utm_campaign=sd &utm_medium=serp&utm_source=jsonld